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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,506	12/01/2004	Akihiro Goto	Q83924	5134
23373 7590 08/14/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER PARKER, FREDERICK JOHN	
			ART UNIT 1792	PAPER NUMBER
			MAIL DATE 08/14/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/516,506

Applicant(s)

GOTO ET AL.

Examiner

Frederick J. Parker

Art Unit

1792

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32, 34, 36, 38, 39, 41, 43-46, 48, 49, 51, 52, 54, 56, 58, 60 and 61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32, 41 and 43-45 is/are allowed.
- 6) ☒ Claim(s) 34, 46, 48, 54, 56, 58, 60 and 61 is/are rejected.
- 7) ☒ Claim(s) 36, 38, 39, 49, 51 and 52 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/19/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This second action non-final is to remedy defects of the previous Office action, and accordingly the previous issues are withdrawn and replaced by the objections and rejections below.

Specification

2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The current abstract is inadequate.

3. The amendment filed as the Preliminary Amendment is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the paragraphs added

on : page 8, para. 1; page 18, para 2; page 21 after line 2; page 24 before 4th Embodiment; page 27 and 34, para. 1; page 36 , before 7th embodiment; page 38, before industrial applicability.

These paragraphs are New Matter because the methods cited include conventional non-compression methods not disclosed in the original specification. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 54,56,58,60,61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claims 54,56,58,60,61 are vague and indefinite because they contain, or are solely, method limitations which fail to provide structure to the apparatus; these should be deleted. Applicant cannot properly claim a combination of a device and a material worked upon, In re Highes 49F. 2nd 478. There is no patentable combination of a device and the material upon which it works, In re Rishoi 94 USPQ 71.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 34,46 are rejected under 35 U.S.C. 102(b) as being anticipated by Moro US 6602561 used in lieu of **WO 99/58744** from which it derives priority.

Moro teaches forming an electrode for electric discharge surface treatment, the electrode formed of a green compact comprising Co metal and WC (an alloy of W and C) by compression molding, followed by heat treatment to treat organic materials and impart strength by “incomplete sintering” (col. 8,57-col. 9,65). A predetermined ratio is on col. 9, 50-52.

The process detailed in the second embodiment and elsewhere, especially col. 11, 3-40; figure 4, etc detail the formation of a coating 16 on workpiece 2 using an electrode 14 immersed in a tank of liquid 13,14 by electric discharge treatment, per claim 46.

8. Claims 54,56,58,60,61 are rejected under 35 U.S.C. 102(b) as being anticipated by Moro, cited for the same reasons previously discussed, which are incorporated herein.

Moro further discloses an apparatus comprising a tank with an immersion liquid and dielectric fluid supply to immerse work (e.g. the heat-treated green electrode); and a power source to create an electrical discharge, including pulsed, between the electrode and work. Given the apparatus and exemplified materials, the apparatus of Moro is capable of successfully treating the materials of Applicants' claims.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moro, cited for the same reasons previously discussed, which are incorporated herein.

While a directionally controlled alloy is not cited, Moro teaches it is conventional to surface discharge treat/ coat hard sintered materials including alloys (col. 1, 36; etc), which includes directionally controlled alloys. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the method of Moro on alloys including directionally controlled alloys to provide the stated benefits of improved corrosion and wear resistance.

Allowable Subject Matter

12. Independent claims 32,41; and dependant claims 36,38,39,43-45,49,51,52 are allowable for the reasons stated in the previous Examiner's Office Action of 3/3/08. Dependant claims 36,38,39,49,51-52 are objected to for depending from a rejected base claim.

Response to Arguments

In view of the new Office Action, response to arguments is moot. The Examiner reminds Applicants that Moro still reads on claims not containing indicated allowable subject matter, and

hence continued rejections. The New Matter rejections appear to have been overlooked previously.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frederick J. Parker
Primary Examiner
Art Unit 1792

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Primary Examiner, Art Unit 1792

